

Remarks

Claims 1 and 6 are rejected under 35 U.S.C. § 102(b) as being anticipated by Clark, et al. (U.S. 6,074,503). Claim 1 has been canceled and claim 6 has been amended to depend from claim 3. The rejection of claims 1 and under 35 U.S.C. § 102(b) is therefore moot.

Claims 1, 2, 7, and 8 are rejected under 35 U.S.C. § 102(e) as being anticipated by Koyasu, et al. (U.S. 2003/0205402). Claims 1 and 2 have been canceled and claim 7 has been amended to depend from amended claim 3. Claim 8 depends from amended claim 7. The rejection of these claims under 35 U.S.C. § 102(b) is therefore moot.

Claims 3-5 and 9-11 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Koyasu, et al. in view of Gerland, et al. (U.S. 3,516,859). The Examiner contends that Koyasu, et al., discloses the invention substantially as claimed but does not disclose an outer skin surrounding the core nor the core being extruded with a forming agent to create the voids. The Examiner proceeds to rely on Gerland, et al., for a disclosure of a cable comprising a core surrounded by an outer skin. The Examiner concludes that it would have been obvious to one skilled in the art to surround the core of Koyasu, et al., with an outer skin to provide the core with a smooth outer surface.

Claim 3 has been rewritten in independent form to include the limitations of the base claim 1 and intervening claim 2. The applicant contends that claim 3 is patentably distinct from Koyasu, et al., and Gerland, et al. The Examiner correctly indicated that Koyasu, et al., lacks teachings of voids substantially surrounding the dielectric enhancing section of the core with an outer skin surrounding the core. Koyasu, et al., in fact teach away from the plurality of voids in paragraphs 85 and 86 of their application wherein they describe the hollow filler as being composed as polyethylene with an outer diameter of 1.2 millimeters and thickness .2 millimeters.

They go onto to recite that polyethylene is classified into high-density polyethylene, low-density polyethylene, and linear low-density polyethylene according to density's thereof however, nowhere do they suggest foaming the material or creating voids therein. The purpose for using these non-formed materials is specified in paragraph 92 in which the filler is described as deforming within the cable by side pressure preventing the wires from moving.


Addition of Gerland, et al.'s voids to these teachings of Koyasu, et al., would arguably destroy or at least diminish this intended purpose because the voids would adversely affect the side pressure on the wires. While Gerland, et al. teaches a method of producing insulations of foam synthetic material and more particularly of foamed polyethylene in a two-pass operation, the methods described therein are not properly combinable with the teachings of Koyasu, et al. In particular, Gerland et al., teaches that foam polyethylene is coated onto a conductor through a thixotropic dispersion of thermoplastic material in pulverulent form wherein the viscosity of the dispersion is reduced by the action of mechanical means at the location at which the conductor passes out of the dispersion in order to coat the conductor. This process of coating a conductor with foamed material teaches away from creating a hollow core having a dielectric enhancing section with a plurality of voids surrounding the dielectric enhancing section. Gerland, et al., also teaches away from the claimed invention in that they teach a copper wire extending therethrough, which cannot by definition act as a dielectric enhancing section because of its conductivity. There is no suggestion in these references to combine the features of a hollow tubular structure surrounded by voids. Likewise, Koyasu, et al., does not teach nor suggest the addition of an outer skin to the hollow structure and Gerland, et al., does not suggest combining the outer skin with the features of a hollow tubular structure surrounded by a plurality of voids.

Reconsideration and withdrawal of the rejection of these claims is therefore respectfully requested.

Claims 9 and 13 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Clark, et al., in view of Gerland, et al. The Examiner contends that Clark, et al., discloses the invention substantially as claimed including the dielectric enhancing section being formed of a thread but does not disclose an outer skin formed of an insulating material surrounding the core and then proceeds to rely on Gerland, et al., for a disclosure of a cable comprising a foam core surrounded by an outer skin formed of an insulating material. The Examiner concludes that it would have been obvious to one skilled in the art to surround the foam core of Clark, et al., with an outer skin to provide the core with a smooth outer surface. Clark, et al., disclose a central channel provided to carry a fiber optic element or a drain wire in that area neither of which are intended to act as a dielectric enhancing section or to supplement the mechanical strength of the filler material. Although, Clark, et al., teaches that the core is extruded, they do not teach nor suggest foamed material or the creation of voids around the dielectric enhancing section. For the reasons stated above, Gerland, et al., does not teach nor suggest combining the features of a dielectric enhancing section with a foamed material surrounding the dielectric enhancing section with the addition of an outer skin. Reconsideration of the rejection of claims 9 and 13 is therefore respectfully requested.

If the Examiner cares to discuss anything presented here in order to further prosecution of the application he is invited to contact the undersigned attorney for the Applicant.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'S. Anastasi', is written over a horizontal line.

Salvatore Anastasi
Registration No. 39,090
Attorney for Applicant
Phone: 610.722.3899
Facsimile: 610.889.3697